# CITY OF ASHEVILLE, NORTH CAROLINA CLASS SPECIFICATION

# S.C.A.D.A. SYSTEMS MANAGER WATER RESOURCES DEPARTMENT

### **GENERAL STATEMENT OF DUTIES**

Performs responsible technical work and directs work in maintaining a computer-based process control system for the City. Employee reports to the Water Production Superintendent.

### **DISTINGUISHING FEATURES OF THE CLASS**

An employee in this class is responsible for directing and assisting in the evaluation, analysis, design, programming and implementation of highly complex information processing systems and procedures. Work involves finding solutions to users' systems and programming problems, maintaining liaison between user departments and management and subordinates and management, and overseeing the development and implementation of various programs. Employee may also be responsible for training users, developing and maintaining appropriate project documentation and maintaining up-to-date knowledge and skills in the field. Tact and courtesy are required in frequent contact with contractors, vendors, consultants and the general public. Extensive judgment is required in making decisions with a high degree of accountability. Work is performed under limited direction of the Water Production Superintendent and is evaluated through conferences and analysis of program achievements.

#### ILLUSTRATIVE EXAMPLES OF WORK

## **ESSENTIAL JOB FUNCTIONS**

Analyzes, evaluates and reviews systems and procedures to provide solutions to reported problems or to improve current operations of the computer-based process control system; communicates evaluations, alternatives, solutions and recommendations to management, users, co-workers, contractors and vendors.

Installs, maintains and repairs various S.C.A.D.A. monitoring equipment and software throughout the water system, including adding and modifying database for Geographic Information System (GIS); creating and maintaining S.C.A.D.A. controls database for City H.T.E. computer system, including utility work orders.

Oversees maintenance of S.C.A.D.A. equipment; evaluates, designs, programs, tests and implements highly complex information systems and procedures; evaluates complex test data and unit tests to assure correction of program errors; evaluates and modifies existing programs or modifications to existing ones to ensure correction of program deficiencies by revision to instructions or altering the sequence of operations.

Trains system operators in the operation of equipment and implementation of procedures. Communicates with engineers and vendors concerning modifications.

Supervises the activities of contractors and tradesworkers during equipment installation.

#### S.C.A.D.A. SYSTEMS MANAGER

Installs, maintains and repairs a variety of personal computer equipment and peripheral equipment for City employees.

Creates maps and layouts for specific applications dealing with S.C.A.D.A. and water system pumps and reservoirs and remote transmittal units.

Monitors and recommends changes to City engineering standards for S.C.A.D.A. system for all new water tank and pumps construction.

Monitors and recommends changes to established development and administrative standards.

Serves as member of various committees, panels, commissions, etc., attending meetings and providing input based on expertise and observations, as appropriate; maintains liaison with other departments to ensure smooth flow of operations and communication.

Attends seminars, conferences, workshops, classes, lectures, etc., as appropriate, to enhance and maintain knowledge of trends and developments in field of computer programming; reviews professional journals and other documents, and may attend association and professional meetings, and otherwise maintains contacts with computer programming professionals to facilitate exchange of information.

# ADDITIONAL JOB FUNCTIONS

Performs related work as required.

## **KNOWLEDGE, SKILLS AND ABILITIES**

Thorough knowledge of data processing techniques, systems and methods.

Thorough knowledge of methods, procedures, and practices of computer programming.

Thorough knowledge of programming techniques, programming languages, operating systems, electronic computers, and peripheral equipment used by the Department.

Considerable knowledge of data processing equipment, systems and methods.

Considerable knowledge of the principles and techniques of systems analysis and design and its application to data processing.

Considerable knowledge of office procedures, methods and practices.

General knowledge of current literature, trends, and developments in the field of large-scale electronic computer operations and personal computers.

Skill in the operation of common office machines, including popular computer-driven word processing and file maintenance programs.

Skill in recognizing, analyzing and providing solutions to difficult data processing problems.

Ability to recognize, analyze, and solve moderately complex problems in a logical manner.

Ability to communicate effectively orally and in writing.

Ability to assist with training of new users.

Ability to evaluate and critique the work of other users.

Ability to prepare clear and concise instructions, and convey them orally and in writing.

Ability to speak before groups of people.

Ability to analyze operations and to organize their component parts into logical systems.

#### S.C.A.D.A. SYSTEMS MANAGER

Ability to detect and correct system failures and report programming failures.

Ability to coordinate and evaluate the work of others.

Ability to exercise considerable independent judgment and initiative in independently performing assigned projects.

Ability to establish and maintain effective working relationships as necessitated by work assignments.

# MINIMUM EXPERIENCE AND TRAINING

Associate's degree in electronics or a related field, and 1 to 3 years of related experience; and/or any equivalent combination of training and experience required to perform the essential position functions.

### **COMPETENCIES**

**Technical Competency:** Ability to use the tools and concepts of the specialty area in which the employee works. Includes using appropriate processes, procedures, resources, and work or professional standards.

**Interpersonal Competency:** Ability to work with people, develop and maintain work relationships, communicate, manage conflict, and perform as an effective team member.

**Intellectual Competency:** Ability to think, learn and process information. Ability to solve problems and gather necessary information. Includes having math and reading skills appropriate to job level.

**Customer Service:** Ability to identify customers, determine the valid needs of a situation, and provide service or service recovery in a manner that satisfies the customer.

**Organizational and Community Sensitivity:** Ability to take the larger perspective into account, recognize organizational and community priorities and balance actions appropriately.

**Physical Skills:** Ability to perform required jobs with adequate strength, dexterity, coordination and visual acuity (with reasonable accommodation[s] if needed) and in a manner that does not pose a direct threat to the health or safety of the employee or others in the workplace.

Salary Grade 15 Non-Exempt